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ABSTRACT

The Project 60 group was an experimental group of 53 disadvantaged students who would not have been admitted to Middlesex Community College through the regular admissions procedures. They had a high school average of 1.7 and were largely below average in reading, math, and composition, both in high school grades and individual testing. Project 60 students participated in a special summer session of skill building, motivational aids, and counseling, before going on to regular college courses. A control group drawn from regularly enrolled students was matched with Project 60 students with respect to town of residence, age, and sex. The success of the Project 60 students was not too different from the regularly enrolled students. At the end of the second year, 45% of the regularly enrolled students had dropped out, compared with 55% of the Project 60 students. Thirty-nine percent of the regularly enrolled students graduated, compared to 15% of the Project 60 students, but 30% of the Project 60 group was still in attendance and intended to graduate. The academic achievement and persistence of both groups of students showed little relation to their high school records or to their scores on the ability test. A special summer session of skill building and motivational aids appears to give disadvantaged students a good chance for college success. (AH)

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A COMPARATIVE STUDY OF THE PERSISTENCE AND ACADEMIC ACHIEVEMENT OF "PROJECT 60" & REGULARLY ENROLLED STUDENTS AT MIDDLESEX COMMUNITY COLLEGE

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INTRODUCTION

It has long been known that there is a direct relationship between socio-economic status of students and the level of education they attain. The lower on the socio-economic scale an individual is found, the less formal education he will complete. Middlesex Community College has responded to this challenge by admitting a number of disadvantaged students. These students may be defined as disadvantaged because they either lack finances or an adequate high school record to be admitted to college.

There is reason to believe that many community colleges will attract increasing numbers of students from minority groups and from disadvantaged backgrounds. If those of us in community colleges accept this responsibility, we will be faced with assessing learning potential and then designing appropriate and rewarding education experiences for students with various levels of academic ability.

The second study included in this report is A Comparative Study of the Persistence and Academic Achievement of "Project 60" Students and Regularly Enrolled Students At Middlesex Community College.

Studies have shown that many different instructional approaches have been tried with disadvantaged students.[1] Schenz reporting on a survey made by the Curriculum Committee of A.A.J.C. in 1964, states that 91 percent of the community colleges have admitted low-ability students, but only 20 percent have provided any special curriculum. Fifty-five percent have offered special remedial courses in English and math, but these are not geared to the disadvantaged student.

Disadvantaged students have characteristics which require more than just a remedial course or two. Gordon and Wilkerson have summarized some of the basic psychological characteristics of these students which handicap them in college:

1. They are poorly motivated, and often where motivation exists it tends to be unrealistic.
2. They are often unrealistic in terms of the time in which they expect to achieve their goals (they often need three years to complete a two-year program) and in terms of goals based on their ability.

(1) Monroe, C., Profile of the Community College. San Francisco: Jossey-Bass, 1972.

3. They often have emotional problems which undermine their self-confidence (they feel whipped before they begin and often express a "what's the use" attitude toward college and life in general).

Clarke and Ammons support the above description of disadvantaged students and feelings of inferiority in contributing to the failure of these students. They think the emotionally depressed students tend to be so passive and non-motivated that they fail to seek help from teachers and counselors.

Other characteristics cited and supported by various studies are:

4. Inability to read which may be responsible....for the large mortality rate in college. (Kandell, 1965)
5. Inability to use abstract and deductive reasoning effectively. Disadvantaged students tend to depend more on real life encounters than on symbolic experience in developing ideas. (Berg and Artell, 1968)
6. Disadvantaged students and their parents are often suspicious of intellectuals, referring to them as eggheads. This same negative attitude toward intellectual achievement creates a negative attitude toward schools and colleges, especially the overly erudite scholarly teacher.

The study made of the first group of disadvantaged students to enroll in Middlesex Community College is reported in A Comparative Study of the Persistence and Academic Achievement of Project 60 and Regularly Enrolled Students.

A COMPARATIVE STUDY OF THE PERSISTENCE AND ACADEMIC ACHIEVEMENT OF "PROJECT 60" & REGULARLY ENROLLED STUDENTS AT MIDDLESEX COMMUNITY COLLEGE

INTRODUCTION

This study was initiated during the first year (1972) of a special program designed to assist students who were academically not admissable to Middlesex Community College. Sixty students (Project 60) were identified by high school counselors and the Middlesex Community College Admissions Office as having less than the necessary requirements to be admitted as regular students.

The study was made to compare the persistence and academic achievement of this experimental group (Project 60) with a control group of regularly enrolled community college students. A factorial design was used because in exploratory experiments it shows what conditions produce what results, but does not tell how these conditions are related.

It was assumed that by the end of the first academic year the experimental group would have completed as many credit hours of course work as the minimum required of regular students. To be classified as a full-time student each semester at Middlesex Community College, it is necessary to be enrolled in at least nine credit hours. Thus, at the end of one year (two semesters) all but a few students have completed at least 18 credit hours. Most students have completed between 24-30 semester hours at the end of their first college year.

The question to be answered was whether the non-admissable students with a special summer session of skill building and motivational aids reached a comparable level of academic achievement and showed equal persistence to regularly enrolled students.

The Project 60 students were invited to participate in two five week summer sessions designed to help them build academic skills. These special summer courses were also designed to increase the students' motivation through enhancement of their self-image and the strengthening of their self-confidence. All students were given special counseling to identify individual needs. Financial assistance, tutoring, and additional counseling were available as needed. Subsequently, the Project 60 students took the basic college level courses.

The control factors used in the study were age, sex, and town of residence of the students. The town of residence was a necessary control because of the commuting problems which might be involved in attendance and because it might be indicative of the quality of high school preparation represented.

Research studies have shown that there is a difference in the persistence and achievement of female and male students, and between older and younger aged students. Thus, the groups were matched by sex and age as well as town of residence.

THE STUDY GROUPS

Experimental Group. The experimental group was the original sixty students who began the program in the summer of 1972. However, after the summer session of skill building and motivational aids only 53 students remained.

Of the 53 students, 35 were male and 18 were female. Over half were under 19 years of age and all but two were under 22 years of age. Thus, age was not considered a major factor.

Control Group. The control group was a matched random sampling of all regularly enrolled students who entered Middlesex Community College in the fall of 1972. The 53 students were matched with the Project 60 students by town of residence, by sex, and by age. Of the 34 males and 19 females, eighteen came from three towns--Woburn, Lowell, and Somerville, twelve were from Bedford, Acton, and Arlington, and eight were from Billerica, Medford, Stoneham, and Tewksbury. The remaining twelve each came from a different town. Thus, twenty-two towns were represented in the control group as well as in the Project 60 group. The characteristics of both groups of students are shown in Table I.

TABLE I
Characteristics of "Project 60" & Control Group
N=53

GROUP	SEX		AGE		
	M	F	19 or under	20-24	25 or over
Project 60	35	18	36	16	1
Control Group*	34	19	31	18	1

*Age of 3 students in Control Group is unknown.

ACADEMIC ACHIEVEMENT IN HIGH SCHOOL AND ACADEMIC ABILITY AS SHOWN BY COMPARATIVE GUIDANCE AND PLACEMENT PROGRAM.

The academic achievement in high school is based on an overall grade point average using the math grade point average and the English grade point average at the time of graduation. The students' academic ability is based on the percentile rating obtained on the Comparative Guidance and Placement Program (CGP) which was administered after their acceptance but just prior to their enrollment at Middlesex Community College.

In using the single high school grade point average for statistical analysis, the total high school English and math grades were averaged singularly and then combined for the overall average. The same procedure was used for each group. There were some differences in the courses taken in high school (math and English) but the differences within each group appeared to be of equal extent to the differences between the two groups.

The overall grade averages were then divided into class intervals using 1.8-2.4 G.P.A. as the average range. Those with higher than 2.4 were classed as above average and those with less than 1.8 as below average. Table II shows the comparison of high school grades between the two groups.

TABLE II
Comparison of Project 60 & Control Group
High School G.P.A. & C.G.P. Scores
N=53

H.S. G.P.A. or C.G.P. Scores	EXPERIMENTAL GROUP "PROJECT 60"		CONTROL GROUP	
	Number	Percent	Number	Percent
H.S. G.P.A				
Above average	13	24	12	23
Average 1.8-2.4	29	55	36	67
Below average	11	21	5	10
Academic Motivation				
Above average	15	28	12	23
Average 40-60 %	5	10	7	13
Below average	33	62	34	64

It can be seen in Table II that a higher percentage of the experimental group were below average in high school grade point average than were the control group--21 percent compared to 10 percent of the control group.

The overall high school grade point average was 2.5 for the control group, but only 1.7 for the Project 60 group. The cumulative high school mean grade point of the control group in English and math was 2.5 and 2.2 respectively, while the cumulative mean grade point of the experimental group was 1.9 in high school English and 1.5 in math.

The scores shown in Table II for academic motivation are based on answers given to questions about attitude toward study, study habits, and achievement in high school. It reflects how the student views himself as a student, and what his values and attitudes seemed to be at the time he responded to the Comparative Guidance and Placement Inventory. It will be noted that two-thirds of both groups are below average in academic motivation.

In discussing the percentile scores of the two groups on the Comparative Guidance and Placement Program, the 40-60 percentile range is considered average, while scores above 60 are considered above average and those below 40 are considered below average. Thus, in reading Table III it will be seen that in reading the experimental group were 23 percent above average and 51 percent below average. The control group were 28 percent above average and 34 percent were below average. The remainder of the table can be read in similar fashion.

It will be noted that over half of the experimental group were below average in reading and sentences, and about a third were below average in the other two measurements--math and letter groups. However, one-third of the control group were also below average in three areas--reading, math, and sentences.

A smaller percentage of the experimental group than the control group were above average in all four measurements. However, neither group showed unusual ability in any area except letter groups where over half of the control group and 42 percent of the Project 60 group were above average.

TABLE III

Comparison of "Project 60" & Regularly Enrolled Students Using Scores on the Comparative Guidance & Placement Program

N=106

CGP Scores	Experimental Group "Project 60" Number	Percent	Control Group Number	Percent
Reading				
Above average	12	23	15	28
Average	14	26	20	38
Below average	27	51	18	34
Math				
Above average	14	26	20	38
Average	16	31	14	26
Below average	23	43	19	36
Sentences				
Above average	9	17	19	36
Average	17	32	14	26
Below average	27	51	20	38
Letter Groups				
Above average	22	42	30	55
Average	13	24	13	26
Below average	18	34	10	19

The Comparative Guidance and Placement reading scores are based on the students' ability to understand main ideas, significant details, and implied ideas in selected paragraphs read in timed sequences. The scores are percentile rankings between 0-100.

Both groups show greater ability in logical reasoning than in reading or math. An exercise called "Letter Groups" is used in the CGP to show logical reasoning. It is composed of five groups of letters with four letters in each group. Four of the groups share a characteristic not common to the fifth group. Students are expected to try various hypotheses to determine which group of letters is different from the other four. The exercise is designed to measure the students' inductive reasoning ability in a non-verbal context. Two-thirds of the "Project 60" group were average or above in logical reasoning, while three-

fourths of the regularly enrolled students were average or above.

Thus, it has been shown that not only did the control group have higher grade point averages in high school--they also scored higher on each of four parts of the Comparative Guidance and Placement Program.

PERSISTENCE AND ACADEMIC ACHIEVEMENT OF "PROJECT 60" STUDENTS AT THE END OF THE FIRST YEAR AT M.C.C.

At the end of the first academic year, 31 percent (17 students) had dropped out of college. Most of them were from the group having average or above high school grades. However, 23 students or 44 percent were in good academic standing, and 22 percent (13 students) were still in attendance even though they had below a 1.8 at M.C.C.

Of the 21 percent (11 students) with below average high school grades, 4 had dropped out, 3 were in good academic standing, and 4 were still in attendance with below average grades at M.C.C. The 13 students with above average high school grades were spread in like manner--3 were in good academic standing, 4 were not in good academic standing, and 6 had dropped out.

Table IV shows how the three groups--drop-outs, students in good academic standing and those not in good academic standing compare in academic motivation and various other measures. It can be seen that the same number of students with below average academic motivation were in good academic standing as had dropped out, and that a much larger percentage of the students with above average motivation were in good academic standing.

The most significant factor shown about the drop-outs is the large percentage who were below average in reading, math, and motivation. The same factor is shown to be true of students not in good academic standing. Thus, at this time motivation, math, and reading scores appear to be more relevant to success at M.C.C. that do high school grades.

TABLE I

ACADEMIC STANDING OF PROJECT 60 STUDENTS AT END OF FIRST YEAR AT M.C.C.

N=53

H.S. G.P.A. & C.G.P. Scores	Total N=53		Students in Good Academic Standing N=23		Drop-Outs N=17		Students Not in Good Academic Standing N=13	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
H.S. G.P.A.								
Above 2.5	13	24	3	6	6	11	4	7
1.8-2.4	29	55	17	32	7	13	5	8
Below 1.8	11	21	3	6	4	7	4	7
Acad. Motivation								
Above Average	15	28	8	15	3	6	4	7
Average (40-60)	5	10	2	4	1	2	2	4
Below Average	33	62	13	25	13	25	7	13
Reading								
Above Average	12	23	6	11	3	6	3	6
Average	14	26	8	15	3	6	3	6
Below Average	27	51	9	17	11	20	7	13
Math								
Above Average	14	26	7	13	4	7	3	6
Average	16	31	9	17	3	6	4	7
Below Average	23	43	7	13	10	19	6	11
Sentences								
Above Average	9	17	5	8	1	2	3	6
Average	17	32	9	17	8	15	0	0
Below Average	27	51	9	17	8	15	10	19
Letters								
Above Average	22	42	9	17	7	13	6	11
Average	13	24	10	19	1	2	2	4
Below Average	18	34	4	7	9	17	5	8

*Percentages may not equal 100 percent because of fractional percentages.

PERSISTENCE AND ACADEMIC ACHIEVEMENT OF THE CONTROL GROUP AT THE END OF THE FIRST YEAR AT M.C.C.

Twenty percent of the control group (11 students) had dropped out by the end of the first year, 54 percent (28 students) were in good academic standing, and 25 percent (14 students) were still in attendance but not in good academic standing.

Of the group which had dropped out, none had below average high school grades and none had above average academic motivation. All of the dropouts were below average in motivation but one. This indicates a positive relationship between persistence at M.C.C and academic motivation.

Table V shows how the high school grade averages and CGP scores are spread for the two groups who persisted and the group which dropped out.

The reading ability of the dropouts followed a normal distribution curve, but their math ability was above average. There is also an indication that the drop-outs had above average ability in logical reasoning. Thus, it seems probable that factors other than academic ability and motivation entered into the students' decisions to leave college.

Of the group of 28 students in good academic standing, one-half of the total group (34 percent) scored below average in academic motivation. Only half of that number however, were below average in reading, math and logical reasoning (letter groups). Thus, it appears that the lack of academic motivation is balanced by better academic ability among the successful students.

The fourteen students not in good academic standing were different from either of the other two groups in every measurement. More of them were below average than above in academic motivation, reading and math. But, the reverse was true in sentences and letter groups. Furthermore, all but two of them had average or above high school grades. Thus, this group which appears to be the borderline group academically, shows more logical reasoning than many of the successful students.

TABLE V

ACADEMIC STANDING OF CONTROL GROUP AT END OF FIRST YEAR AT M.C.C.

N=53

H.S. G.P.A. or C.G.P. Scores	Total N=53		Students in Good Academic Standing N=28		Drop-Outs N=11		Students Not in Good Academic Standing N=14	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
H.S. G.P.A.								
Above 2.5	12	23	5	10	2	3	5	8
1.8-2.4	36	67	20	38	9	17	7	13
Below 1.8	5	10	3	6	0	0	2	4
Acad. Motivation								
Above Average	12	23	7	13	0	0	5	8
Average	7	13	3	6	1	1	3	6
Below Average	34	64	18	34	10	19	6	11
Reading								
Above Average	15	28	8	15	3	5	4	7
Average	20	38	11	21	5	9	4	7
Below Average	18	34	9	17	3	5	6	11
Math								
Above Average	20	38	9	17	6	11	5	8
Average	14	26	10	19	2	3	2	4
Below Average	19	36	9	17	3	5	7	13
Sentences								
Above Average	19	36	8	15	5	9	6	11
Average	14	26	9	17	2	3	3	6
Below Average	20	38	11	21	4	[illegible]	5	8
Letters								
Above Average	30	55	15	28	7	13	8	15
Average	13	26	5	10	3	5	5	8
Below Average	10	19	8	15	1	1	1	1

*Percentages may not equal 100 percent because of fractional percentages.

COMPARISON OF THE TWO GROUPS AT THE END OF THE FIRST YEAR AT M.C.C.

Of the 53 students who comprised each group, there were only six more of the regularly enrolled students than the "Project 60" group remaining at the end of the first year. This seems to indicate that the students receiving the motivational aids and skill building were almost as persistent and achieving almost as well as the control group.

However, 10 percent more of the regularly enrolled students were in good academic standing. The same percentage of each group (25 percent) were still enrolled but not in good academic standing (below 1.8 grade point average).

Drop-Outs.

The drop-outs in both groups were largely from the average or above average range in high school grades. This seems to indicate very little relationship between persistence at M.C.C. and high school grades. More students who dropped out of both groups were also in the below average range in academic motivation.

The "Project 60" drop-outs were largely below average in reading and math; whereas, the control group drop-outs were largely average or above. Many more students in the "Project 60" drop-outs were also below average in sentences and logical reasoning than were the regularly enrolled group.

Students in Good Academic Standing.

As many of the "Project 60" students who were in good academic standing at M.C.C. had below average high school grades as had above average grades. Math and reading ability seemed to have little effect on the students who were in good standing in both groups. As many were above as below average in math ability and there was little difference in reading scores. Most of the differences in sentences and letters show that the regularly enrolled students had higher scores than the experimental group, but not significantly higher.

Students Not in Good Academic Standing.

High school grades appear to have little relationship to academic standing at M.C.C. Students in both groups who persisted but were not achieving at a satisfactory level had a similar range in high school grades to those who were doing satisfactory college work. As many were above average as were below average in each of the groups.

TABLE VI

COMPARISON OF ACADEMIC STANDING OF CONTROL & EXPERIMENTAL GROUPS AT END OF FIRST YEAR AT M.C.C.

N=106

Academic Standing	Students in Good Academic Standing		Drop-outs		Students Not in Good Academic Standing	
H.S. G.P.A. & C.G.P. Scores	Experimental Group	Control Group	Experimental Group	Control Group	Experimental Group	Control Group
H.S. G.P.A.	N=23	N=28	N=17	N=11	N=13	N=14
Above Average	6	10	11	3	7	8
Average	32	38	13	17	8	13
Below Average	6	6	7	0	7	4
Academic Motivation						
Above Average	15	13	6	0	7	8
Average	4	6	2	1	4	6
Below Average	25	34	25	19	13	11
Reading						
Above Average	11	15	6	5	6	7
Average	15	21	6	9	6	7
Below Average	17	17	20	5	13	11
Math						
Above Average	13	17	7	11	6	8
Average	17	19	6	3	7	4
Below Average	13	17	19	5	11	13
Sentences						
Above Average	8	15	2	9	6	11
Average	17	17	15	3	0	6
Below Average	17	21	15	7	9	8
Letters						
Above Average	17	28	13	13	11	15
Average	19	10	2	5	4	8
Below Average	7	15	17	1	8	1

PERSISTENCE AND ACADEMIC ACHIEVEMENT OF PROJECT 60 STUDENTS AT THE END OF THE SECOND YEAR AT M.C.C.

Table VII shows that eight (15 percent) of the "Project 60" students graduated from M.C.C. at the end of the second year. Twenty-nine (55 percent) had dropped out of college, leaving 16 students (30 percent) still in attendance. Of the 16 remaining, twelve were still in good academic standing and four were not.

Graduates. The high school grade average of the graduates of this group was below a 2.0. And, half of the group had below average motivation, reading, and sentence ability. There is little in the Comparative Guidance and Placement scores to show predictors of success. However, even though only 15 percent of the original group graduated at the expected time (the end of the second year), thirty percent were still in attendance.

Students in Good Academic Standing. Of the twelve students in good academic standing who did not graduate, the average number of semester hours completed was 42 and the mean grade point was 1.8. This is not indicative of good academic achievement, but it may mean that several more will be able to graduate in subsequent semesters.

More of the students scored below average in each measurement than scored average and above except in math. For example, eight were below average in reading, one was average, and three were above average. A similar picture is shown in Table VII for each of the other variables.

Students Not in Good Academic Standing. The four students not in good academic standing had a mean grade point of 1.57 with an average of 38 semester hours of credit earned. One student was above average in motivation, reading and logical reasoning. All others were average or below in each measurement. There is little reason to believe that these students will not complete the 60 semester hours needed for graduation.

Drop-Outs. The high school grade average of the second year drop-outs was 1.7. Most of them were below average in each of the other variables used in the study. In only one area did the students consistently score above average--logical reasoning.

There is very little difference in the measured abilities between those who graduated and those who dropped out. This would lead one to conclude that there are factors other than academic achievement and academic ability which determine the persistence of disadvantaged students who are admitted to

TABLE VII

ACADEMIC STANDING OF PROJECT 60 STUDENTS

AT END OF SECOND YEAR AT M.C.C.

N=53

H.S. G.P.A. & C.G.P. Scores	Total N=53		Graduated		Students in Good Academic Standing		Drop-outs		Students Not in Good Academic Standing	
	No.	% of Total	N=8	%=15	N=12	%=23	N=29	%=55	N=4	%=7
H.S. G.P.A.										
Above 2.5	5	9	1	12	3	25	1	4	0	0
1.8-2.4	23	43	4	50	3	25	14	48	2	50
Below 1.8	25	48	3	38	6	50	14	48	2	50
Academic Motivation										
Above Average	14	26	2	25	2	17	9	31	1	25
Average	7	13	2	25	3	25	2	7	0	0
Below Average	32	60	4	50	7	58	18	62	3	75
Reading										
Above Average	12	23	3	38	3	25	5	17	1	25
Average	13	24	1	12	1	8	9	31	2	50
Below Average	28	53	4	50	8	67	15	52	1	25
Math										
Above Average	15	28	3	38	4	33	8	28	0	0
Average	17	32	3	38	3	25	10	34	1	25
Below Average	21	40	2	25	5	42	11	38	3	75
Sentences										
Above Average	5	9	0	0	1	8	4	14	0	0
Average	20	38	2	25	3	25	13	45	2	50
Below Average	27	51	6	75	8	67	12	41	1	25
Letters										
Above Average	20	38	4	50	5	42	10	34	1	25
Average	14	26	1	12	1	8	10	34	2	50
Below Average	19	36	3	38	6	50	9	31	1	25

community/junior colleges on special programs.

PERSISTENCE AND ACADEMIC ACHIEVEMENT OF REGULARLY ENROLLED STUDENTS AT THE END OF THE SECOND YEAR AT M.C.C.

Table VIII shows that twenty (39 percent) of the original control group graduated at the end of the second year at M.C.C. Twenty-four (45 percent) had dropped out, seven (13 percent) were still in attendance in good academic standing, and two students were not in good academic standing, but were still enrolled.

Graduates. More of the graduates had above average than below average high school grades. But, the same group were below average in reading, math, and sentences.

The twenty students who graduated comprised about one-third of the total control group. This percentage of graduates is in the same range as that of most community colleges.

Students Remaining in Attendance. Of the nine still enrolled, only two were not in good academic standing. But, nearly all of them were within one semester of graduation and they were largely above average in all other measurements except academic motivation.

Drop-Outs. The drop-outs were largely from the above average high school group. One-half of them had above a 2.5 in high school, but they were not highly motivated--fifty-eight percent were below average. In most other measurements their scores fell into a normal distribution pattern. However, they were largely above average in logical reasoning.

COMPARISON OF THE TWO GROUPS AT THE END OF THE SECOND YEAR AT M.C.C.

It is obvious that a larger percentage of the regularly enrolled students graduated at the end of two years than did the Project 60 group. However, if one assumes that all the students who have persisted for two years will eventually graduate, the difference is considerably smaller.

Fifty-five percent of the Project 60 students had dropped out as compared to 45 percent of the control group. However, thirty percent of the experimental group were still in attendance, while only 16 percent of the regularly enrolled students had not dropped out or graduated.

TABLE VIII

ACADEMIC STANDING OF CONTROL GROUP AT END OF SECOND YEAR AT M.C.C.

N=53

H.S. G.P.A. & C.G.P. Scores	Total N=53		Graduated N=20		Students in Good Acad. Standing N=7		Drop-outs N=24		Students Not in Good Acad. Standing N=2	
	No.	%	No.	% =39	No.	% =13	No.	%=45	No.	% =3
H.S. G.P.A.										
Above 2.5	24	45	8	40	4	57	12	50	0	0
1.8-2.4	16	30	6	30	2	29	6	25	1	50
Below 1.8	13	25	6	30	1	14	6	25	1	50
Acad. Motivation										
Above Average	12	23	8	40	1	14	3	13	0	0
Average	11	21	3	15	2	29	6	25	0	0
Below Average	29	55	9	45	4	57	14	58	2	100
Reading										
Above Average	16	30	4	20	4	57	7	29	1	50
Average	19	36	8	40	2	29	9	38	0	0
Below Average	18	34	8	40	1	14	8	33	1	50
Math										
Above Average	21	40	7	35	5	71	8	33	1	50
Average	14	26	5	25	2	29	7	29	0	0
Below Average	18	34	8	40	0	0	9	38	1	50
Sentences										
Above Average	19	36	5	25	3	43	10	42	1	50
Average	11	21	3	15	2	29	6	25	0	0
Below Average	23	43	12	60	2	29	8	33	1	50
Letters										
Above Average	31	58	10	50	4	57	16	66	1	50
Average	10	19	4	20	0	0	6	25	0	0
Below Average	12	23	6	30	3	43	2	8	1	50

It becomes increasingly obvious that both groups of students do not fit the typical pattern of "two years of attendance at a community college leading to an associate degree." Many of them will require more than the two years. It was shown in the descriptive characteristics that two-thirds of the students have some type of employment while attending classes and about one-fourth work 25 hours or more each week on their job.

SUMMARY.

The Project 60 group was an experimental group of students who would not have been admitted to Middlesex Community College through the regular admissions procedures. They had a high school average of 1.7 and were largely below average in reading, math, and sentences both in the Comparative Guidance and Placement Program and in high school grades. They did show an above average ability in logical reasoning based on the "letter groups" exercise in the Comparative Guidance and Placement test.

However, at the end of the first year, only 31 percent had dropped out of college while 44 percent were in good academic standing. The remaining fourth were still enrolled and had a mean G.P.A. below 1.8 at M.C.C.

The picture of the Project 60 students is not too different from the regularly enrolled students. Twenty percent had dropped out, 54 percent were in good academic standing, and 25 percent were still enrolled with less than a 1.8 mean grade average.

At the end of the second year, when it is assumed that most students will graduate, only 39 percent (20) of the regularly enrolled students graduated. Forty-five percent had dropped out, and 16 percent (9) were still in attendance.

Thus, when looking at the Project 60 students one finds only moderate differences. Fifteen percent (8) of the students graduated but 30 percent (16) of the students were still planning to continue toward a degree. Fifty-five percent had dropped out.

Very little relationship was shown between the academic achievement and persistence of either group of students to their high school record or their scores on the ability test. And, even though the study cannot be concluded at this time when it is apparent that at least 30 percent of the students have neither completed a program or shown evidence of not completing it, some conclusions can be drawn.

CONCLUSIONS.

There is very little relationship between the academic achievement/persistence and high school grades or ability test scores of students who enter Middlesex Community College. This is true whether the students are regularly admitted students or those brought in on special programs for the disadvantaged.

However, for the disadvantaged students it appears as though the summer of skill building and motivational aids may have been beneficial. This study does not compare disadvantaged students with and without the summer session assistance. It compares the students who received the assistance with students who are assumed to be ready for college level work.

Furthermore, if one summer session can encourage students to try college, and almost as many persist for two years as do regularly enrolled students, then it appears to be a successful endeavor and should be continued. In fact, if similar types of offerings were made available to all students who student personnel workers identify as needing assistance, there is a possibility that the percentage of students who complete a program at M.C.C. could be increased.

RECOMMENDATIONS.

It has been shown that many disadvantaged students have a good chance for success if they are given good assistance in the form of good counseling, remedial work, and special tutoring.

A developmental programs goes beyond offering a few remedial courses. The most prevalent deficiency is in reading and English. Unfortunately, there is a dearth of information about how to teach reading to adults, and the techniques used in elementary schools is probably less than suitable for college students.

Many reports give evidence of positive results in remedial reading. However, as Kendricks and Thomas, 1970, reported after a decade of experimentation, "There is no panacea, formula, or "best plan" for remedial programs."

If remedial instruction is to be effective, however, instructors must have special training for their work and the counseling services must be deeply involved in proper diagnosis

and placement of students.[1] It is recommended that the program designed for Project 60 students be expanded to include all students identified by the combined efforts of special instructors and counselors as in need of special courses.

Unfortunately, special programs cost additional money and sufficient funds are not easily available. But, experimentation should be continued and new approaches to learning should be explored.

(1) Ibid.

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